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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,363	07/25/2008	Robert Bruce Nicholson	GB920030112US1	9883
49132	7590	09/21/2010		
HARRINGTON & SMITH 4 RESEARCH DRIVE, Suite 202 SHELTON, CT 06484-6212			EXAMINER WONG, TITUS	
			ART UNIT	PAPER NUMBER
			2184	
			MAIL DATE	DELIVERY MODE
			09/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,363	NICHOLSON ET AL.	
	Examiner	Art Unit	
	TITUS WONG	2184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/21/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Great Britain on January 21, 2004. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 42-51 are not limited to tangible embodiments. The broadest reasonable interpretation of a claim drawn to a computer readable storage medium typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. See MPEP 2111.01. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claim Objections

Claims 22-33 are objected to because of the following informalities:

Claim 22, line 1, "Apparatus" should read –An apparatus–.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al. (US Publication No. 2003/0014600 A1) hereafter referred to as Ito'600.

Referring to claim 22, Ito'600, as claimed, an apparatus to control access to logical units (computer gain access to logical units, see para. [0057] and Fig. 1) where a plurality of logical units are accessible via a network (fiber channel 113, see Fig. 1) by at least one port (ports 102-104 and 108-112, see Fig. 1), comprising: a definition unit to define a set (Group ID (GID), see para. [0070]) so as to comprise at least one port that requires access to certain logical units (GID allocated to the host computers when they are grouped into arbitrary groups, see para. [0070]), the set having a name and being a named set; and an association unit operable to associate the named set (LUN management access table and WWN S_ID_GID conversion table, see paras. [0051] and [0052]) with the certain logical units to enable a determination of identification information for the at least one port by referencing the name.

As to claim 23, Ito'600 discloses a logical unit comprises an addressable entity that accepts commands (FCP_CDB stores command information of SCSI, see paras. [0052]-[0056] and Fig. 4) and a port comprises an addressable entity that sends

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commands (host computer transmits the frame storing the command to a storage system to be accessed, see para. [0057]).

As to claim 24, Ito'600 discloses the certain logical units comprise a part of a storage device (storage subsystem 101, see Fig. 1) accessed via a storage area network (Fiber channel 113, see Fig.1 and para. [0004]).

As to claim 25, Ito'600 discloses the storage area network uses a SCSI protocol (SCSI command, see para. [0039]).

As to claim 26, Ito'600 discloses the storage area network comprises a Fibre Channel interface (Fiber Channel, see para. [0039]).

As to claim 27, Ito'600 discloses said definition unit comprises means for coupling together a plurality of ports that are members of the set and providing a locating address for the set (GID allocated to the host computers when they are grouped into arbitrary groups, see para. [0070]).

As to claim 28, Ito'600 discloses said definition unit is operable to logically identify those ports that are members of the set using port identification information (WWN (N Port Name), see para. [0070]).

As to claim 29, Ito'600 discloses said definition unit is at a first location, and where said association unit is at a second location (see Fig. 1).

As to claim 30, Ito'600 discloses identification information is changeable in response to changes in port configurations (LUN access management table can be flexibly configured, see paras. [0091]-[0093], and Fig. 11).

As to claim 31, Ito'600 discloses logical units are identified by logical unit numbers (LUN, see para. [0053]).

As to claim 32, Ito'600 discloses said association unit is embodied in a storage controller (storage control device 116 for controlling data write/read to and from storage unit groups, see para. [0063] and Fig. 1).

As to claim 33, Ito'600 discloses said storage controller is operable as a back up storage by associating all ports of the storage controller in all named sets and by selecting which named set the logical units are associated with (it is interpreted that the storage subsystem can dynamically change associations and backup, see paras. [0063]-[0064] and [0092]).

Note claims 34 and 42 recite the corresponding limitations of claim 22. Therefore they are rejected based on the same reason accordingly.

Note claim 35 recites the corresponding limitations of claim 23. Therefore they are rejected based on the same reason accordingly.

Note claim 36 recites the corresponding limitations of claim 24. Therefore it is rejected based on the same reason accordingly.

Note claims 37 and 45 recite the corresponding limitations of claim 25. Therefore they are rejected based on the same reason accordingly.

Note claims 38 and 46 recite the corresponding limitations of claim 26. Therefore they are rejected based on the same reason accordingly.

Note claims 39, 43, and 44 recite the corresponding limitations of claim 27. Therefore they are rejected based on the same reason accordingly.

Note claims 40 and 47 recite the corresponding limitations of claim 28. Therefore they are rejected based on the same reason accordingly.

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Note claim 41 recites the corresponding limitations of claim 30. Therefore it is rejected based on the same reason accordingly.

As to claim 48, Ito'600 discloses the operation of associating occurs at a plurality of locations (the tables can be set by user through the input unit of the maintenance terminal equipment, see para. [0066]).

Note claim 49 recites the corresponding limitations of claim 31. Therefore it is rejected based on the same reason accordingly.

Note claim 50 recites the corresponding limitations of claims 28 and 30. Therefore it is rejected based on the same reason accordingly.

As to claim 51, Ito'600 discloses a given one of a group of ports is one of a physical or logical group of ports (ports 102-104 and 108-112, see Fig. 1 and WWN in Fig. 12).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Satoyama et al. (U.S. Publication No. 2004/0268069 A1) discloses a storage system where the volume into which data is to be replicated can be selected.

Ito et al. (U.S. Publication No. 2005/0005064 A1) discloses a security for logical unit in storage subsystem.

Aoshima et al. (U.S. Publication No. 2005/0204104 A1) discloses a server and method for managing volume storing digital archive.

Suzuki et al. (U.S. Publication No. 2007/0016681 A1) discloses a system for managing an access path.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Titus Wong whose telephone number is (571) 270-1627. The examiner can normally be reached on Monday-Friday, 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Henry Tsai can be reached on (571) 272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TW

/Henry W.H. Tsai/
Supervisory Patent Examiner, Art Unit 2184